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(54) Title: ICE RECRYSTALLISATION INHIBITION PROTEIN OR ANTIFREEZE PROTEINS FROM DESCHAMPSIA, LOLIUM AND FESTUCA SPECIES OF GRASS

(57) Abstract: The present invention relates to nucleic acids or nucleic acid fragments encoding amino acid sequences for polypeptides involved in tolerance to freezing and/or low temperature stress in plants. More particularly, the present invention relates to nucleic acids or nucleic acid fragments encoding amino acid sequences for ice recrystallisation inhibition proteins (IRIPs) in plants, and the use thereof for the modification of plant response to freezing and/or low temperature stress. Even more particularly, the present invention relates to polypeptides involved in tolerance to freezing and/or low temperature stress in Deschampsia and Lolium species.